United Nations ECE/CES/2015/41

Economic and Social Council

Distr.: General
22 May 2015

English only

Economic Commission for Europe

Conference of European Statisticians

Sixty-third plenary session
Geneva, 15-17 June 2015
Item 4 of the provisional agenda
Modernization of statistical production and services and managing for efficiency

Product and service innovation at Statistics Netherlands

Note by Statistics Netherlands

Summary

This paper describes the strategic initiatives taken by Statistics Netherlands to increase the public value of official statistics. In the climate of budget cuts in almost all public organizations, it is of particular importance and requires continuous improvement and innovation of products and services. The paper describes how Statistics Netherlands strives to deliver factual information at the right time for evidence-based policy making. This strategy has implications both for the statistical work at Statistics Netherlands and for the way the communication is organized.

This paper is presented for discussion to the second session of the Conference of European Statisticians' seminar "Modernization of statistical production and services and managing for efficiency".

GE.15-10383 (E)

1510383

Please recycle

I. Introduction

1. Statistics Netherlands faces severe budget cuts, just as almost all public organizations in the Netherlands. In this climate, it is of particular importance to maximize the public value of official statistics. This requires continuous improvement and innovation of the products and services. An important goal of a national statistical institute is to enable rational evidence-based policy making, i.e. policy making based on facts. However, it becomes more and more difficult to characterize complex phenomena in society using just one or a few indicators. To overcome this problem, Statistics Netherlands is revising its strategy by reporting more underlying indicators in a coherent way to create a deeper and more complete understanding of developments in society. In this way, Statistics Netherlands strives to deliver factual information at the right time which can be used effectively by policymakers. This strategy has implications both for the statistical work at Statistics Netherlands and for the way the communication is organized.

2. The most recent Strategic Statistical Programme[1] of Statistics Netherlands covers years from 2014 to 2018. It has been prepared on the basis of extensive discussions with the main users. On the basis of these discussions, the Programme identifies the following as statistical priorities:

(a) New statistical products about *globalization* and internationalization of enterprises;

(b) New statistical products about the *labor market*, in particular about flexibilization and migration;

(c) New statistical products about *financial assets and liabilities* of households and enterprises;

(d) Better *accessibility* of statistics, in particular on the internet;

(e) More *specialized statistical studies* for central and local government;

(f) More *timely* statistics.

3. Due to budget cuts, resources for these priorities are very limited, at most two percent of the annual budget of Statistics Netherlands, and must partly be realized by dropping some statistical programmes.

4. In 2015, some further elaborations have been made. The first one is that Statistics Netherlands will focus much more on communication, presenting itself to users as a news organization.

5. Secondly, focus will shift from individual statistics to coherent statistical information describing the whole of a phenomenon in society; e.g. communication and statistics around unemployment focus now more on the phenomenon of the labor market as a whole and less on unemployment alone. This approach will also

[1] Every four or five years Statistics Netherlands draws up a Strategic Statistical Programme (Statistics Netherlands, 2013), which gives guidance to new statistical products and new ways of communication, and which is accompanied by a multi-annual budget proposal. This Program and the accompanying budget have to be confirmed by the Council of Ministers and are sent for information to Parliament. The separate years covered by the Programme are translated by Statistics Netherlands into annual work programs and by the responsible Minister into annual budgets.

identify gaps in the statistical program around this phenomenon as well as possible linkages between phenomena.

6. And thirdly, we have established an innovation unit in order to speed up the implementation of new ideas and tools, so that we may respond more quickly and flexibly to new user needs.

II. Strategic priorities for 2014-2018

A. User needs

7. Statistical priorities should be based on user needs. However, because statistics are a public good, it is not always easy to elicit user needs and user preferences. Therefore, Statistics Netherlands has an extensive network of advisory committees and contacts with users. The most recent Strategic Statistical Programme has been prepared on the basis of extensive discussions with our users or their representatives: ministries, organizations of provinces and municipalities, employer organizations, labor unions, press and universities, as well as with focus groups of selected users, such as young people and scientists. We feel that it is important to make this consultation as broad as possible, and to include diverse groups of users and also non-users.

B. Dropping statistical programs

8. Whereas users are always willing to propose new statistical programs or new ways of communication, they often have difficulties in setting priorities, in particular with reference to existing programs. A consultation round similar to that for new priorities has been attempted, but it delivered few concrete results.

9. However, because of severe budget cuts, it was necessary to drop some statistical programme in order to make room for new priorities. The alternative of no new statistical programmes was deemed unacceptable: the national statistical office would become increasingly less relevant if it was not responsive to changes in society and changes in user needs. So instead, we have followed a different approach where the balancing of statistical programs was made by Statistics Netherlands on the basis of criteria, referring amongst others to usage, costs, and external requirements; it is described more fully in Zeelenberg et al (2010). Of course, this list of programs to be ended has been discussed with the advisory committees and with ministries, but this has not led to major changes in the list.

C. New statistical topics[2]

10. The user needs as expressed in the consultation round were on the surface very diverse and very specific. However, they could be grouped into six categories:

[2] The text of this paragraph is mostly quoted from the Strategic Statistical Program.

1. New statistical products about globalization and internationalization of enterprises

11. As a result of globalization and digitalization, geographical features (e.g. national borders) and physical distances have become less important. Trade via the internet means that national borders now hardly play a role for consumers. While the relevance of international economic developments is evident for an open economy like the Dutch one, Dutch competitiveness and the appeal of the Netherlands as a business base is increasingly a regional rather than a national issue. This means that national figures are more and more often an average of very different underlying regions, each with its own strengths and weaknesses. The value of national statistics is thus reduced, increasing the need for figures at a regional level. In the next few years, new regional figures will be developed along these lines.

2. New statistical products about the labor market, in particular about flexibilization and migration

12. The labor market is becoming increasingly fragmented, as a result of which the distinction between employee and self-employed is becoming less clear, and new groups have come into being such as self-employed people without employees and pay-rollers. New 'groups' on the labor market and the underlying motives of the labor market actors concerned will be described. Insight into these aspects will provide policymakers, researchers and society with a more complete and better insight into how the labor market works.

13. Also, because of the lively public debate about international migration, it is important to chart the structure, flows and characteristics of labor migration and its consequences for the Dutch labor market and the social security system.

3. New statistical products about *financial assets and liabilities* of households and enterprises

14. New statistics will give as complete a picture as possible of the financial position of various groups in relation to their status on the housing market, life cycle, economic position and labor market status. This will make it clear, for example, how the rapidly expanding group of self-employed that does not have any employees covers their financial risks and the extent of their financial safety nets.

4. Better accessibility of statistics, in particular on the internet

15. The accessibility of data in our online database StatLine will be increased further in the next few years. The search engine and navigation structure of the website will also be improved.

16. In addition there is an increasing demand for open data. All our online data is now accessible as open data, i.e. through well-defined meta data and a common API; see http://www.cbs.nl/nl-NL/menu/cijfers/statline/open-data/default.htm and http://opendata.cbs.nl/dataportaal/portal.html#_la=en. Public and private organizations will then be able to develop themselves products, services and applications on the basis of our data.

17. Local authorities in particular have a great need for data at the local levels of districts and neighborhoods. We will make existing information – that can often be presented geographically – more accessible, and will expand the available information. Another development in this respect is the European harmonization of geographical data, making it easier to compile statistics on border-crossing regions.

18. Finally, new cryptographic methods such as secure multi-party computation (Wikipedia, 2015), might make it possible to combine advanced security and increased access to microdata. But this is an area that requires much further research, such as in the development of appropriate statistical analysis tools. Together with Statistics Sweden, Eurostat and universities we are looking into this research.

5. More specialized statistical studies for central and local government

19. In recent years, the number of requests for customized studies and the demand for microdata have grown sharply. To be able to fulfill the growing demand in both areas, the capacity of and services provided by our Centre for Policy-related statistics will be extended. The costs involved will be recovered in the fees charged for the work.

6. More timely statistics

20. Further improvement in timeliness remains an important goal. The use of new sources, big data and new ways of surveying are points of departure in this respect. In the process organization, too, reduction of throughput time and thus more timely results have a high priority. And again: users' wishes will be set against costs and potential effects on administrative burden.

D. Coherence

21. The increasing complexity of modern society has led to more demand for "evidence" on which policy making may be based; cf. Keuning and Zeelenberg, 2002. This inherent complexity leads also to a demand for coherent evidence. It is no longer sufficient to have data on several unconnected phenomena. Also, developments in society are much faster than before, and information travels very much faster than some decades ago. So we have user needs for more data that must be at the same time more coherent and timelier and must also show more of the dynamics of modern society.

22. Statistics Netherlands responds to this trend by shifting focus from individual statistics to coherent statistical programs describing the whole of a phenomenon in society. This approach will also identify gaps in the statistical program around this phenomenon as well as possible linkages between programs.

23. As an example, take communication and statistics about unemployment. Communication around unemployment focuses now more on the phenomenon of the labor market as a whole and less on unemployment alone. In the unemployment releases we also present data on the number of jobs, and we try to relate changes in unemployment to changes in the number of jobs. In the process of doing this, we became aware that what we really needed was data on the flows on, from and to the labor market, so that in effect we would have a complete picture of stocks and flows of the labor market and associated life-cycle statuses such as retirement, schooling, disguised unemployment, household work and so on. In technical statistical terms: we need an accounting system of the stocks and flows of the population according to the various activities of individuals. So we are now working on trying to complete the picture of the labor market, by integrating various research and development efforts.

E. Innovation

24. An important aspect of creating new statistics and production processes for them is the time needed for implementation. To answer quickly to new user demands, it is necessary to have flexible production processes that can be quickly implemented or adapted to new demands. To speed up this innovation process, Statistics Netherlands has founded an *innovation lab*, a unit for innovation, separate from research on the one hand and production on the other hand (Verbruggen and Braaksma, 2014; Braaksma et al, 2012). Such an innovation lab makes it possible to transfer ideas and tools from outside to inside as well as assist in implementing these in production and act as intermediary between research and implementation.

III. Conclusions and recommendations

25. Looking at the questions posed to the seminar, we may draw conclusions from the previous discussions.

A. How should statistical products evolve to respond to new demands, including information needs for policy decisions?

26. In the medium term, statistical product innovation should proceed through elaborate discussions with users. We should use not only existing channels, but also modern ones such as internet, focus groups, public consultation, and perhaps also social media such as Facebook.

27. In the short term we should try to keep up to date by intensive contacts with the main users, in particular ministries, and with the press.

B. What new data-based services need to be developed to enhance users ability to extract knowledge out of data?

28. We believe that open data will be the most important new service that enables users to extract data and use this in their own databases and applications. Besides this, better access to microdata, either onsite at the national statistical office or through remote access, will remain an important service, and continuous improvement is needed. Also, more advanced means of cooperation such as through secure multi-party communication needs more attention and research into its possibilities.

C. How can national statistical offices increase access, usability and re-use of data to strengthen value and quality?

29. There are two means to increase access and usability. The first is to adapt to new ways of communication; at present this means open data and smart phones, but we must keep up with future developments and identify new possibilities. This is an area where international cooperation can be especially fruitful.

30. Secondly, coherence between statistics and integrated description of social phenomena should be a high priority for national statistical offices. It is no longer sufficient to present statistics as such. On the contrary, we should describe a phenomenon with the help of coherent statistics, and also identify gaps where new statistics are needed to describe the phenomenon in question.

D. What are the key constraints (including legal) to promoting greater data integration to generate value for users?

31. The greatest challenge will be to maintain impartiality and equal access to all users, in particular when cooperating with private enterprises and public institutions.

E. Which could be the strategic partnerships with private sector to enhance tools for data-analytics as a service?

32. The most important strategic partnerships would be with the press, in particular in making special reports, forecasting, research and analysis agencies within or linked to the government, and private data-processing and information enterprises, such as Google, banks, and credit card companies.

33. For this cooperation to be successful, it is important that NSIs have a unit for innovation, separate from research on the one hand and production on the other hand. Such an "innovation lab" makes it possible to transfer ideas and tools from outside to inside as well as assist in implementing these in production and act as intermediary between research and implementation.

References

Arjan de Jong, Erik Schepens, Jos Schiepers, Jeroen van Velzen, Henk Verduin, Marga Verstege-Jilesen and Kees Zeelenberg, 2011, *Review of statistical priorities at Statistics Netherlands*. Discussion Paper 2011-07, Statistics Netherlands. www.cbs.nl/nl-NL/menu/methoden/onderzoek-methoden/discussionpapers/archief/2011/2011-x10-07-art.htm

Barteld Braaksma, Nico Heerschap, Marco Roos and Marleen Verbruggen, 2013, *Innovation at Statistics Netherlands*. Paper presented at the UN-ECE *Seminar on New Frontiers for Statistical Data Collection*. www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.44/2012/mtg2/WP7.pdf

Steven Keuning and Kees Zeelenberg, 2003, *Samenhang in de statistiek* (Coherence in statistics). In: A.P. Ros and H.R.J. Vollebergh (eds), *Ontwikkeling en Overheid*, SDU: The Hague, pp. 139-150.

Statistics Netherlands, 2013, *Strategic multi-annual programme 2014-2018*. www.cbs.nl/en-GB/menu/organisatie/corporate-informatie/publicaties/archief/2013/strategic-multi-annual-programme-2014-2018.htm

Marleen Verbuggen and Barteld Braaksma, *Innovation at Statistics Netherlands*. Invited presentation at the IAOS 2014 Conference Meeting the demands of a changing world, 8-10 October 2014, Da Nang, Viet Nam. https://iaos2014.gso.gov.vn/document/marl1.s1.v1.pptx

Wikipedia, 2015, *Secure multi-party computation*. http://en.wikipedia.org/wiki/Secure_multi-party_computation